Inventor: Rudolf Gilmanshin Atty Docket No. C00989.70054.US Express Mail Label No. EV 292547524 US Date of Deposit: July 17, 2003 Atty Docket No. C00989.70054.US

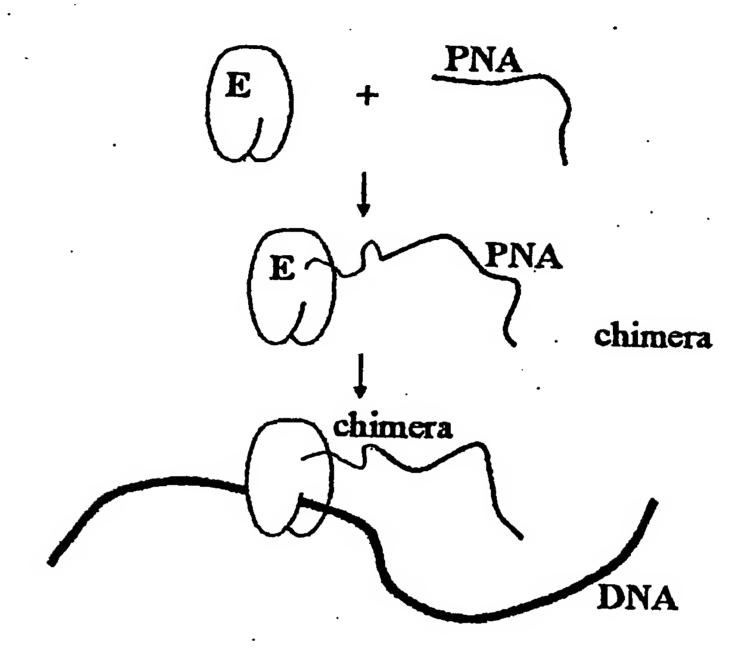
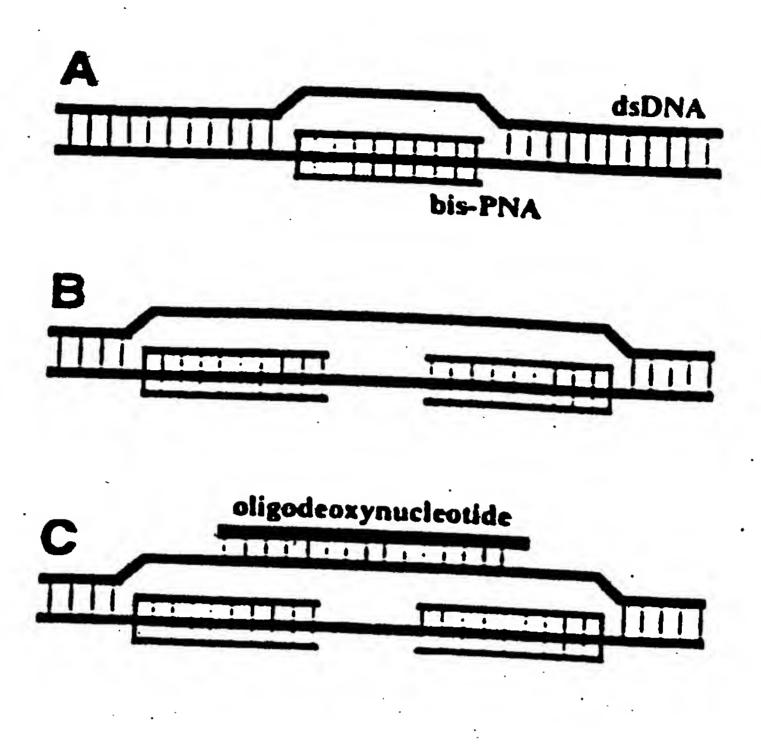


Figure 1. Making the PNA-Enzyme (E) chimera and its interaction with DNA.

Figure 2. Examples of conjugation of fluorescent groups (R1 and R2) to protein surface amino (a), carboxylic (b), and thiol (c) groups with isothiocyanine, carbodiimide, and alkyl bromide respectively.

Figure 3



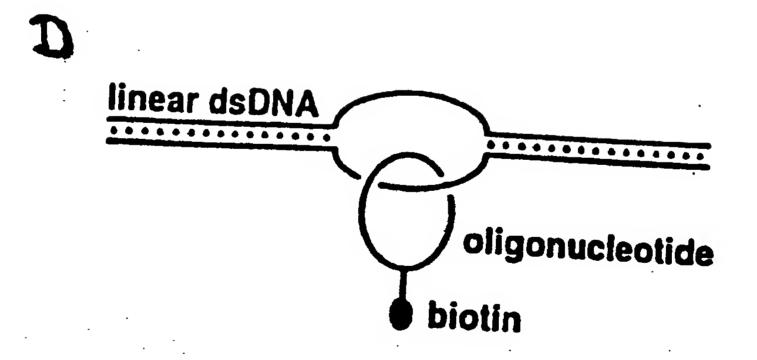


Figure 4

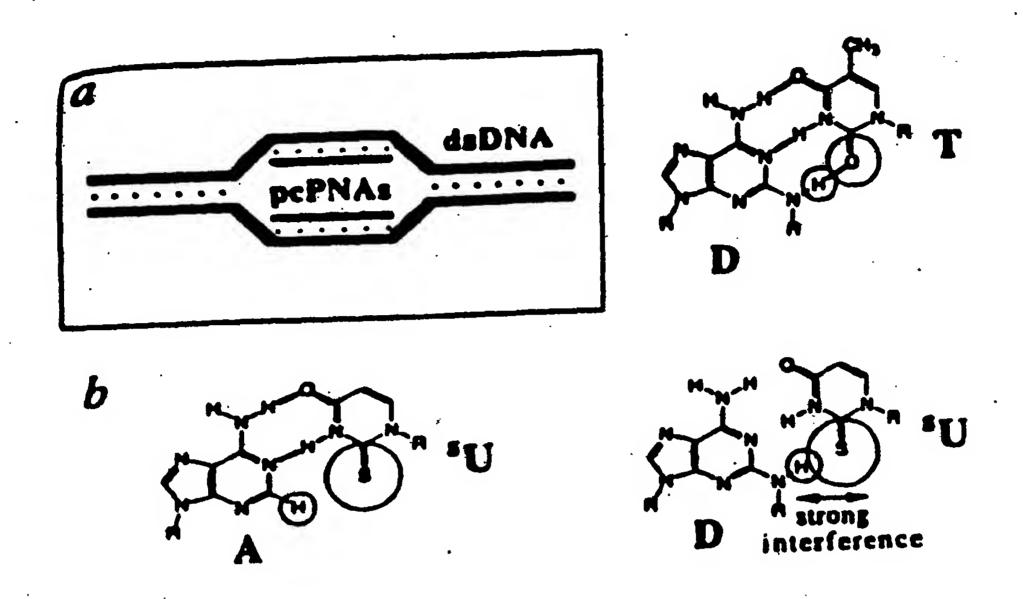


Figure 5

Locked nucleic acid (LNA)

Figure 6